## Management Indicator Species for the New Plan

Success in maintaining and restoring composition, structure, and function of forest ecosystems within desired ranges of variability is reflected by both changes in forest condition and by levels of management and other effects that are shaping these communities. Monitoring will include tracking the abundance of major forest cover/community types and levels of management activities conducted to maintain and restore desired conditions. Population trends and habitats of Management Indicator Species will be monitored to help indicate effects of national forest management within selected communities.

**Indicator**: Hooded Warbler (Wilsonia citrina)



From USGS Patuxent Bird ID InfoCenter

**Reasons for Selection**: Changes in presence and abundance of hooded warblers in mature mesic deciduous forests will be used to help indicate the effectiveness of management at providing dense understory and mid-story structure within these forest communities.

## **Ecology & Life History**

Basic Description: A small bird (wood warbler).

**Reproduction Comments:** In most areas, nesting occurs mainly from mid- to late May through July. In Ohio, most clutches are completed from mid-May to mid-June (Peterjohn and Rice 1991). Clutch size three to four (rarely five). Incubation, by the female, lasts 12 days. Young are tended by both parents, leave nest in 8-9 days, fly 2-3 days later, remain with adults for several weeks. Sexually mature usually in one year.

**Ecology Comments**. Breeding territory size generally is about 0.5-0.75 ha. Males and females also maintain separate winter territories. Commonly returns to

same winter territory in successive years (Powell and Rappole 1986, Rappole and Warner 1980); often joins mixed flocks within territory (Stiles and Skutch 1989). Breeding density may range up to 22 pairs per 40 ha.

**Long Distance Migrant:** Y

**Migration Comments:** In fall, migrates over Gulf of Mexico (east to Greater Antilles). Departure from nesting areas occurs mainly from late July to late September. Begins to arrive in southern Mexico in mid-August, abundant there by late September. Arrival on the wintering grounds extends through late October or early November. In spring follows a more westerly route over the western Gulf and coastal plain of Mexico and Texas. Arrives in breeding areas generally from March or early April through mid-May. Recorded in South America October-April (Ridgely and Tudor 1989).

Palustrine Habitat(s): FORESTED WETLAND, RIPARIAN

**Terrestrial Habitat(s):** FOREST - HARDWOOD, SHRUBLAND/CHAPARRAL, WOODLAND – HARDWOOD.

Habitat Comments: BREEDING: nests in understory of deciduous forest, especially along streams and ravine edges, and thickets in riverine forests (AOU 1983). Inhabits both young and mature forests but is most abundant in the latter. A dense shrub layer and scant ground cover are important. In North Carolina, common in mountain ravines with dense growth of mountain laurel (KALMIA LATIFOLIA) and rhododendron (RHODODENDRON spp.) and in bottomland swamps with dense pepperbush (CLETHRA ALNIFOLIA) and giant cane (ARUNDINARIA GIGANTEA) (LeGrand, pers. comm.). Generally favors large tracts of uninterrupted forest, but sometimes nests in forest patches as small as 5 ha, probably where these are close to larger forested areas. Nest placed in sapling or shrub in dense deciduous undergrowth, usually between 0.3 - 1.5 m. Individuals often return to the same area to nest in successive years (males are more likely to do so than females).

**NON-BREEDING**: undergrowth of various wooded habitats, scrubby areas, and thickets (AOU 1983). On winter range males occupy more mature forests than do females (Powell and Rappole 1986, Lynch et al. 1985); males use closed canopy forests, females use shrub or field habitats (Morton 1990). Older birds occupy higher quality habitat (Stutchbury 1994).

Food Habits: INVERTIVORE

**Citation:** NatureServe Explorer: An online encyclopedia of life [web application]. 2002. Version 1.6, Arlington, Virginia, USA: NatureServe. Available: http://www.natureserve.org/explorer. (Accessed: May 15, 2003).